

Reissue of U.S. Patent No. 5,878,745 Copy of Specification Pursuant to 37 C.F.R. §1.173(a)(1)

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proximal end, said ring being a moulded product of relatively thin and softly pliant elastomeric material, said ring including within the inner periphery of said annulus an apertured panel or membrane establishing separation between a pharyngeal-chamber side and a laryngeal-chamber side, said ring further integrally including at its distal end a distally open tubular conduit for operative engagement and communication with the oesophageal inlet, said tubular conduit extending from its distally open end and in the proximal direction adjacent said panel and on the pharyngeal side of said panel;

- a domed backing-plate member of relatively stiff elastomeric material and having a concave side which terminates in a generally elliptical footing in a geometric plane and in sealed engagement with said panel at the inner periphery of said annulus, said backing-plate member having an airway-tube connecting formation on a proximally directional axis that is at an acute angle with said geometric plane, said backing-plate member providing stability to the inner periphery of said annulus and directional stability for said tubular conduit;
- an airway tube connected to said connecting formation;

a gastric-discharge tube connected to said tubular conduit.

- 2. The mask construction of claim 1, in which said airway tube and said gastric-discharge tube are bonded to each other in side-by-side relation.
- 3. The mask construction of claim 1, in which said tubular conduit extends proximally to approximately 50 percent of the longitudinal extent of said inflatable ring.
- 4. The mask construction of claim 1, in which said tubular conduit extends proximally to at least 50 percent of the longitudinal extent of said inflatable ring.
- 5. The mask construction of claim 1, in which said backing-plate member is formed for directionally guiding relation to said tubular conduit, to determine a straight proximal direction of said tubular conduit for substantially the distal half of the longitudinal extent of said mask.
- 6. The mask construction of claim 5, in which said backing-plate member is further formed for tubular-conduit guidance on generally a helical arc to a location of gastric-discharge tube entry to said mask alongside said airway tube.
- 7. The mask construction of claim 1, further including an inflatable back cushion comprising a panel of softly compliant elastomeric material bonded peripherally to the pharyngeal-chamber side of said annulus and extending over said tubular conduit.
- 8. The mask construction of claim 7, in which said back-cushion panel is peripherally bonded to said tubular conduit.

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9. The mask construction of claim 8, in which said back-cushion bond to said tubular conduit extends for substantially the distal half of the longitudinal extent of said inflatable ring.

10. The mask construction of claim 8, in which (a) a first arcuate circumferential fraction of said tubular conduit is connected to said backing-plate member, (b) the bond of said back cushion to said tubular conduit is angularly spaced from and generally opposite the connection of said tubular conduit to said backing-plate member, the bond to said back cushion being over a second arcuate circumferential fraction of said tubular conduit, (c) the arcuate circumferential extent by which said angular tubular-member connections are made to said backing-plate member and to said back cushion being reinforced with circumferentially arcuate stiffener formations.

11. The mask construction of claim 10, in which said stiffener formations are arcuate ribs in axially spaced array.

12. The mask construction of claim 11, in which said ribs project radially outward of said tubular conduit.

13. A laryngeal mask construction for concurrent airway service to a patient's laryngeal inlet and for removal of gastric-discharge products from the oesophagus, said construction comprising:

- an inflatable/deflatable ring in the form of a generally elliptical annulus having an outer periphery configured for continuously sealed adaptation to the laryngeal inlet, said ring being a moulded product of relatively thin and softly pliant elastomeric material, said ring integrally including at its distal end a distally open tubular conduit through a distal opening in said ring, said distally open tubular conduit being for operative engagement and communication with the oesophageal inlet;
- a backing-plate member of relatively stiff elastomeric material having a concave front side which is adapted to face the laryngeal inlet and which terminates in an elliptical footing in a geometric plane and in peripherally sealed engagement with the inner periphery of said inflatable/deflatable ring, said backing-plate member having an airway-tube connecting formation on a proximally directional axis that is at an acute angle with said geometric plane, said backing-plate member having a lumen for airway-tube communication with the laryngeal inlet, and said backing-plate member providing stability to the inner periphery of said annulus and proximally directed directional stability for said tubular conduit;
- an airway tube connected to said connecting formation; and
- a gastric-discharge tube connected to said tubular conduit.

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